

MEMORANDUM OF UNDERSTANDING

DEPARTMENT OF AGRICULTURE
FOREST SERVICE

AND

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

FOR THE
PRODUCTION, EXCHANGE, AND DISSEMINATION
OF
CARTOGRAPHIC PRODUCTS AND SERVICES

I.. PURPOSE

This Memorandum of Understanding (MOU) sets forth the general terms and conditions under which the U.S. Department of Agriculture-Forest Service (FS) and the U.S. Department of the Interior, U.S. Geological Survey (USGS), National Mapping Division (NMD), will coordinate the production, exchange and dissemination of conventional and digital base cartographic and related spatial data in order to make effective use of each agency's products and services. This MOU is consistent with the revised Office of Management and Budget (OMB) No. Circular A-16 ("Coordination of Surveying, Mapping, and Related Spatial Data Activities") spatial data coordination process which directs Federal agencies involved with mapping, surveying and related spatial data activities to enhance coordination in order to "avoid wasteful duplication of effort" and ensure "effective and economical management of information resources."

Interagency Agreements (IA) enacted under this MOU will have the following objectives:

- to reduce potential redundancies in data collection and production efforts,
- to provide for cost-effective use of national cartographic data standards, as adopted by mutual agreement, for products exchanged between the two agencies and distributed to other users,
- to strengthen communication between the agencies regarding mapping requirements and applications in the short-and long-term, and
- to improve sharing of technical information between the two agencies.

II. BACKGROUND

The Forest Service is responsible for the management of the more than 191 million acres of National Forest System lands, including 156 National Forests, 19 National Grasslands, and 83 Experimental Forests and Ranges. To accomplish this land management mission, the FS requires the collection of reliable, cyclically updated base cartographic, remotely sensed, and geographic or resource spatial data to meet requirements

unique to the Forest Service. The FS produces and maintains updated base cartographic spatial data in both conventional map and digital form as part of its Primary Base Series mapping program, which builds upon the USGS 7.5 minute topographic map series. Other spatial data products produced to meet FS requirements include digital elevation models, orthophotoquads, and Secondary Base Series maps used as the base for Forest Visitor Maps.

The Geological Survey, as the Nation's largest civilian mapping agency, is responsible for the production, collection, archiving and dissemination of base cartographic, geographic and remotely sensed data and information in both conventional map and digital form for the United States, its territories and possessions. To accomplish this mission, the USGS produces and maintains several series of accurate, general purpose base maps and thematic maps and develops and maintains a digital geographic and cartographic data base to meet broad, multi-purpose needs.

The FS and USGS have a long history of cooperation in the production of mapping and associated products. Previous agreements between the two agencies have addressed the issues of map revisions (August 1979, March 1983), digital elevation models (November 1985), remote sensing and geographic information systems, (March 1986), orthophotoquads (May 1988, September 1990), and digital map data (November 1990). Both agencies desire to continue and strengthen their mutual efforts.

As the FS and USGS share a common interest in the generation, collection, use and transfer of spatial data, it is incumbent on the two agencies to work cooperatively to optimize their respective program resources while simultaneously satisfying the legislative mandates for each agency.

III. SCOPE

Under this MOU, the FS and the USGS will collaborate as mutually agreed on such activities as the acquisition of aerial photography, collection and exchange of digital cartographic data, preparation and revision of primary base map products, generation of orthophotoquads, printing and distribution of graphic products, archiving and distribution of digital products, exchange and dissemination of information regarding cartographic data, and the transfer and application of remote sensing and geographic information systems technology.

IV. AUTHORITIES AND POLICIES

This MOU between the U.S. Forest Service and the U.S. Geological Survey is joined under the authority of the Economy Act of 1932, as amended (31 U.S.C. 1535-1536), and OMB Circular A-16 as revised in 1990.

V. DEFINITIONS

To ensure each agency fully understands the requirements of agreed upon collaborative efforts, technical and non-technical terms and acronyms will be defined in each interagency agreement.

VI. RESPONSIBILITIES

U.S. Forest Service

FS will:

- define the FS areas of interest, requirements for F6 base cartographic data including high altitude aerial photography and related orthophotoquads, the standard products and services generated to meet these requirements, and the product standards and specifications used.
- in cooperation with USGS, explore ways to accommodate requirements for base cartographic products and services covering the FS areas of interest that were identified through the OMB Circular A-16 process.
- maintain a level of effort in digital data collection, map revision and orthophotoquad production, within resource constraints, that will ensure timely and efficient completion of cooperative work as mutually agreed.
- provide USGS with conventional map and digital products produced by the FS in mutually agreed upon standards and formats.

U.S. Geological Survey

USGS will:

- define its national cartographic data requirements, covering all or part of FS areas of interest, that are based upon OMB Circular A-16 responses, existing interagency agreements and USGS's internal program needs.
- maintain a level of effort in digital data collection, map revision and orthophotoquad production that will ensure timely and efficient progress, within resource constraints, towards completion of cooperative work covering FS selected areas of interest as mutually agreed.
- provide for archiving and dissemination of conventional map and digital products produced by the FS in mutually agreed upon standards and formats.
- provide technical assistance in digital data collection, and in the use of geographic information systems and remote sensing image processing.

U.S. Forest Service and U.S. Geological Survey

The FS and USGS will meet at least once annually to:

- Review requirements for cartographic products and services covering FS's areas of responsibility and jointly plan production under cooperative agreements based upon available resources of both agencies.
- Review status of operational program activities authorized in support of collaborative agency initiatives.
- Address and resolve unique programmatic and technical issues between the two agencies.
- Review proposed and on-going FS and USGS Interagency Agreements and amendments and develop work plans regarding the production and exchange

of specific digital cartographic and related data.

VII. IMPLEMENTATION PLAN

Specific implementation plans for cartographic products and services will be developed and appended to this MOU as new Interagency Agreements (IA) and/or amendments to existing IA's when production requirements are defined and resources become available. Copies of signed IA's are to be furnished to the following addresses:

USDA-Forest Service
National Forest System
Engineering Staff
14th & Independence Ave., SW
Washington, DC 20250

U.S. Geological Survey
National Mapping Division
Office of External Coordination
590 National Center
Reston, VA 20192

Implementation plans may include but not be limited to:

- Definition of cartographic product(s) or service(s) to be supplied.
- Standards and technical specifications.
- Agency responsibilities.
- Identification of points of contact.
- Production and delivery schedules.
- Duration of the plan/project.
- Definition of financial arrangements.
- Technology transfer provisions.

VIII. TECHNICAL REQUIREMENTS

Specific product standards, technical specifications, and product evaluation procedures will be determined and agreed upon for each respective agreement constituted under the auspices of this MOU.

IX. FINANCIAL ARRANGEMENTS

USGS and FS will, through direct appropriations, cost/work share, or full reimbursement, provide agreed upon product(s) and/or service(s). The former may be produced in-house or under contract where appropriate to meet scheduled needs.

Direct Appropriations

Each agency will support the other's requirements for standard series products to the extent resources are available, including those requirements and priorities determined through the revised OMB Circular A-16 process.

Cost/Work Share

Cost/work share arrangements may be used by both agencies to facilitate product preparation and also to expedite their data requirements. A quid pro quo data exchange is considered within the scope of work share arrangements.

Full Reimbursement

The agencies may provide full reimbursement for services or products rendered that would be considered non-standard. The agencies also will make available to each other copies of existing cartographic products at prevailing prices.

X. PERIOD OF AGREEMENT

This MOU will remain in effect until terminated by mutual agreement and may be modified at any time upon joint approval. Interagency agreements considered as addenda to this MOU will be reviewed on a cyclic basis by the respective management staffs of each agency to determine their necessity for continuance.

This MOU will supersede a number of Interagency Agreements and Memoranda of Understanding already in existence between FS and USGS. Appendix I is a list of the agreements considered superseded by, addenda to, expired, and not covered by this MOU.

XI. POINTS OF CONTACT

Forest Service

Deputy Chief, National Forest System

U.S. Geological Survey

Chief, National Mapping Division

XII. APPROVALS

U.S. Department of Agriculture

Chief, Forest Service

(Signed Original on File)

Date: 5/4/92

U.S. Department of the Interior

Director, Geological Survey

(Signed Original on File)

Date: 3/18/92

Appendix I

I. EXISTING INTERAGENCY AGREEMENTS/MEMORANDA OF UNDERSTANDING TO BE SUPERSEDED BY THE NEW MEMORANDUM OF UNDERSTANDING

<u>Agency</u>	<u>Date Signed</u>	<u>Description</u>
FS/GS	3-28-86	Process and guidelines for entering into remote sensing and GIS cooperative work.

II. INTERAGENCY AGREEMENTS/MEMORANDA OF UNDERSTANDING THAT WILL BECOME ADDENDA TO THE NEW MEMORANDUM OF UNDERSTANDING

FS, R6,GSC/GS	1-31-91	Work share for production of high resolution OQ's on the Umatilla & Wallowa-Whitman National Forests.
FS/GS, EROS-AK	1-11-90	Development of digital spatial resource data bases and application of GIS technology for Chugach National Forest, Alaska.
FS, PNW F&R STA/ GS, EROS-AK FIELD	3-9-89	Provide image acquisition, processing, and technical assistance to conduct natural resource inventories in Alaska.
FS/GS	11-7-88	Work-share arrangement for DLG production.
FS,INTERMTN F&R STA/GS, EDC	5-17-88	Evaluate greenness index for indicating fire danger.
FS/GS	11-29-85	Production and/or exchange of digital elevation data.
FS/GS	3-14-83	Policy and procedures for revising selected 7.5' maps on a cost-share basis.
FS/GS	3-29-76	Policies and procedures regarding the exchange and dissemination of information on cartographic data.

III. INTERAGENCY AGREEMENTS/MEMORANDA OF UNDERSTANDING WHICH HAVE EXPIRED OR ARE NO LONGER VALID

FS,GSC/GS,WMC	9-20-90	Work share for production of OQ's on and near the Clearwater and St. Joe National Forests.
FS/GS/BLM/PS	7-7-90	For production of a map of the National Wild and Scenic River System.
FS, R6/GS,WMC/BLM /Oregon	5-22-89	Coordination of digital data collection and dissemination of digital PLSS coordinate information.
FS, R6,GSC/GS,WMC	1-11-89	Production of OQ's in the Umpqua and Siskiyou National Forest.
FS,R6/GS,WMC	11-4-87	GIS pilot project in the Siuslaw National Forest, Oregon.
FS, Pac. SW/GS,WMC	1-27-87	Classification of timber and other vegetation types for districts within the Los Padres National Forest.
FS, R10,GSC/ GS, RMMC	6-2-86	Share technical capabilities for the production of orthophoto products for areas of the Tongass National Forest.
FS,GSC/GS,WMC	8-29-85	Pilot project work-share for the production of OQ's in Idaho.
FS,R3/GS, RMMC	7-22-80	Work-share for the production of OQ's covering Carson National Forest.
FS,GSC/GS, RMMC	7-9-80	Work-share for OQ production in Montana.
FS/GS	8-9-79	Work share for revision of 7.5-minute quadrangles.

IV. INTERAGENCY AGREEMENTS/MEMORANDA OF UNDERSTANDING NOT COVERED BY THE NEW MEMORANDUM OF UNDERSTANDING AND STILL VAED

FS/GS/BLM

11-8-88

Coordinate interrelated technical and programmatic issues related to major systems development.